Session Program

10–11 Dec 2019

MLZ User Meeting 2019

Poster session

Marriott, Marriott Conference room - Munich
Berliner Str. 93 80805 München Germany

Wednesday 11 December

13:30

Poster session

Poster Session | **Location:** Marriott, Marriott Conference room - Munich, Berliner Str. 93 80805 München Germany

Cold Neutron Depth Profiling at the PGAA facility

Speaker
Markus Trunk

Chemical analysis with Neutrons at the MLZ

Speakers
Dr Zsolt Revay, Dr Christian Stieghorst, Dr Xiaosong Li

REFSANS: The horizontal time-of-flight reflectometer with GISANS option at the Heinz Maier-Leibnitz Zentrum

Speaker
Gaetano Mangiapia

Thiophene based Semiconductors for Organic Solar Cells

Speaker
Mr Roy Schaffrinna

An innovative testing machine for heating, quenching, tension, compression and cracking studies of industrial relevant high-temperature alloys – HiMat BMBF project

Speaker
Cecilia Solis

Free thin film sample preparation for Users by Molecular Beam Epitaxy

Speaker
Sabine Pütter

Characterization of VDM Alloy 718 CTP (DIN 2.4668 / UNS N07718) in different hardened conditions and the relationship between hardening phases and the alloy’s hydrogen embrittlement susceptibility

Speaker
Julia Botinha

Development of a new target station for external electric field application at PLEPS

Speaker
Mr Ricardo Helm

Materials Science group at Heinz Maier-Leibnitz Zentrum (MLZ)

Speaker
Dr Ralph Gilles

The MLZ Neutron Optics Group

Speaker
Dr Peter Link

Studies on VDM alloy 780 Premium with standard heat treatments using synchrotron radiation

Speaker
Dr Lu Qin

Development of a new testing device for in-situ microstructural characterization under mechanical and thermal loading

Speaker
Frank Kümmel

Highly-Regular Porous Germanium Oxide Thin Film Electrode for Lithium-ion Batteries

Speaker
Mr Suzhe Liang

Cryo-TEM – A Complementary Technique for Neutron Scattering

Speaker
Marie-Sousai APPAVOU

Visualization and quantification of freeze drying processes with neutron imaging

Speaker
Nicole Vorhauer

Bambus: a new inelastic neutron multiplexed analyzer for Panda at MLZ

Speaker
Alexandre Bertin

Investigations on the Growth Process of Poly(N-isopropylacrylamide) Mesoglobules under High-Pressure

Speaker
Geethu Pathirassery Meledam

Multi-scale phase quantification of strain-induced martensite in Austempered Ductile Iron (ADI) using different neutron diffraction techniques

Speaker
Xiaohu Li

Influence of printing temperature on the efficiency of organic solar cells

Speaker
Linus Huber

The high resolution neutron backscattering spectrometer SPHERES

Speaker
Michaela Zamponi

PUMA: thermal three-axes spectrometer equipped with multi-analyzer and unique polarization option

Speaker
Jitae Park

What is the initial stage of degradation mechanism for perovskite solar cells?

Speaker
Mr Renjun GUO

In-situ GIWAXS measurements on 2-step slot-die printed thin-film perovskite layers for solar cell application

Speaker
Manuel Scheel

Self-diffusion in Mercury investigated with quasi-elastic neutron scattering

Speaker
Sandro Szabo

KWS2 - small angle neutron diffractometer

Speaker
Aurel Radulescu

QENS and in-situ SANS Investigations of Complex Hydrides

Speaker
Neslihan Aslan

Self-assembly of large magnetic nanoparticles in ultrahigh molecular weight linear diblock copolymer films

Speaker
Mr Wei Cao

3D printed humidity chamber for neutron scattering experiments

Speaker
Tobias Widmann

SAPHiR: Neutron diffraction and high resolution radiography under high pressure and temperature conditions

Speaker
Nicolas Walte

Lattice strain evolution of the solution heat-treated Mg-Ca alloys at room and elevated temperature under in-situ compressive deformation

Speaker
Weimin Gan

Non-uniform capacity fading in lithium-ion batteries revealed by spatially-resolved diffraction of neutrons and synchrotron radiation

Speaker
Dominik Petz

Fast Ionic Conductivity in the Most Lithium-Rich Phosphidosilicate Li$_{14}$SiP$_{6}$

Speaker
Stefan Strangmüller

Investigation of capacity fade mechanisms and modeling for lithium ion batteries cycled under different state of charge ranges

Speaker
Jiangong Zhu

Determination of the structure of cobalt-free Li-Mn-rich oxides

Speaker
Weibo Hua

In-situ printing of PBDB-T-SF:IT-4F for application in high-efficiency organic solar cells

Speaker
Kerstin Wienhold

Cononsolvency in PNIPAM-based block copolymer thin films

Speaker
Ms Christina Geiger

Small-Angle Neutron Scattering Instrument SANS-1 at MLZ

Speaker
Sebastian Muehlbauer

BIODIFF - Macromolecular Neutron Diffraction at the Heinz Maier-Leibnitz Zentrum MLZ

Speakers
Tobias Schrader, Andreas Ostermann

Nanostructured SnO2 Templated by Amphiphilic Block Copolymer for Lithium-Ion Battery Anodes

Speaker
Ms Shanshan Yin

Morphology Tuning of ZnO Nanostructures for Hybrid Solar Cells

Speaker
Ms Ting Tian

Targeted use of residual stresses in electric sheet to increase energy efficiency

Speaker
Tobias Neuwirth

High Resolution Powder Diffractometer SPODI

Speaker
Markus Hoelzel

The cold neutron imaging beam line ANTARES

Speaker
Michael Schulz

A new high resolution detector system at ANTARES

Speaker
Michael Schulz

DNS - diffuse neutron scattering spectrometer at MLZ

Speaker
Dr Thomas Mueller

Neutron & X-ray diffraction studies of graphite anodes conducted at MLZ

Speaker
Stefan Seidlmayer

RESI- The thermal single crystal diffractometer

Speaker
Bjoern Pedersen

Influence of solvent on the morphology and optical properties of printed active layers based on PBDB-T-SF:IT-4F for application in organic solar cells

Speaker
Daniel Steger

Bio-hybrid thin films for templating titania nanostructures

Speaker
Mr Julian Heger

Formation of a micrometer positron beam at the Scanning Positron Microscope

Speaker
Mr Johannes Mitteneder

KWS-3 VERY SMALL-ANGLE NEUTRON SCATTERING FOCUSING DIFFACTOMETER AT MLZ

Speaker
Vitaliy Pipich

EMIM-DCA post-treatment of semi-conducting PEDOT:PSS polymer thin films to improve their thermoelectric properties

Speaker
Anna-Lena Oechsle

Revealing the formation of sputter deposited metal nanolayers on functional polymer thin films for lithium-ion batteries

Speaker
Simon J. Schaper

KWS-1: High-flux SANS instrument with polarization analysis

Speaker
Artem Feoktystov

Kinetics of Colloidal Quantum Dots during Printing

Speaker
Mr Wei Chen

Interfaces in polymer based thin-film lithium-ion batteries

Speaker
Mr Georg Glänzer

Printed organic thin films for photovoltaic applications – a morphology study

Speaker
Sebastian Grott

Highly ordered titania films with incorporated germanium nanoparticles calcined under different atmospheres

Speaker
Nian Li

In-situ investigation of electrode sputter deposition for non-fullerene organic solar cell applications

Speaker
Ms Xinyu Jiang

KOMPASS – the polarized cold neutron triple-axis spectrometer at the FRM II

Speaker
Dr Dmitry Gorkov

ErwiN in the making - a Fast Neutron Powder Diffraction Option

Speaker
Michael Heere

Studying the dynamics of PTB7:PCBM organic photovoltaic active layers

Speaker
Dominik Schwaiger

Synthesis of Mesoporous TiO2 by using PS-b-P4VP as template block co-polymer: Fabrication and Analysis

Speaker
Magdalini Spyranti

Wearable Electronic Skin based on Triboelectric and Luminescent Effect for Pressure and Tensile Sensing

Speaker
Mr Tianxiao Xiao

Future Upgrade of the 2D ACAR Spectrometer at NEPOMUC

Speaker
Mr Josef Ketels

Panda a cold neutron TAS at MLZ

Speakers
Dr Igor Radelytskyi, Dr Astrid Schneidewind

The Structural and Thermal Behavior of the Thermoresponsive Polymer Poly(N-isopropylmethacrylamide) in Aqueous Solution

Speaker
Chia-Hsin Ko

Germanium-based nanostructure synthesis guided by amphiphilic diblock copolymer templating

Speaker
Christian Weindl

Simultaneous injection of positrons and electrons – progress towards a pair-plasma at NEPOMUC

Speaker
Markus Singer

Effect on Conformational Transformation of Methyl Side Group in Poly(sulfobetain)-Based Thermo-responsive Block Copolymer Thin Films

Speaker
Mr Peixi Wang

Thermoelectric thin hybrid films based on PEDOT:PSS and inorganic nanoparticles

Speaker
Suo Tu

A New Measuring Cell for Operando Neutron Diffraction on Li-Ion Battery Cathode Materials

Speaker
Daniel Sørensen

In-situ characterization at high temperature of VDM alloy 780 Premium

Speaker
Cecilia Solis

Monitoring selectivity of gold cluster growth/formation on antifouling-relevant zwitterionic thin block copolymer coatings

Speaker
Dr Apostolos Vagias

Optimising the gamma/gamma' microstructure and increasing the high temperature strength of a Co-base superalloy

Speaker
Mr Daniel Hausmann

Phase transformations in CoRe-based alloys with Cr and Ni addition studied by in-situ neutron diffraction

Speaker
Dr Přemysl Beran

The multi-purpose three-axis spectrometer (TAS) MIRA at FRM II

Speaker
Robert Georgii

Structural investigation on PTX-loaded poly(2-oxazoline) molecular brushes

Speaker
Jia-Jhen Kang

Dedicated neutron scattering instrument for complex magnetic structures POLI

Speaker
Vladimir Hutanu

Diffraction Experiments under Extreme Conditions on Single Crystals with Hot Neutrons on HEiDi

Speaker
Dr Martin Meven

POWTEX – Angular- and Wavelength Dispersive, High-Intensity Neutron TOF Diffractometer

Speaker
Yannick Meinerzhagen

The Coincident Doppler-Broadening Spectrometer at NEPOMUC

Speakers
Vassily Vadimovitch Burwitz, Leon Chryssos, Lucian Mathes, Thomas Schmidt

Sample Environment at MLZ

Speakers
Juergen Peters, Alexander Weber

Development in Sample Environment

Speakers
Dr Alexander Weber, Daniel Vujevic

TOFTOF cold neutron time-of-flight spectrometer at MLZ

Speaker
Marcell Wolf

Total Reflection High-Energy Positron Diffractometer at NEPOMUC

Speaker
Matthias Dodenhöft

On the use of BaCe0.85Y0.15O3-d as a multi-functional ingredient in solid oxide fuel cells

Speaker
Kiril Krezhov

Size-dependent spatial magnetization profile of Manganese-Zinc ferrite nanoparticles

Speaker
Mathias Bersweiler

The resonant neutron spin echo spectrometer RESEDA

Speakers
Dr Christian Franz, Johanna K. Jochum

High-resolution spectroscopy and diffraction at TRISP

Speaker
Dr Thomas Keller

NREX – polarized neutron/X-ray reflectometer

Speaker
Yury Khaydukov

Neutron optics for neutron beta decay studies with Proton Electron Radiation Channel (PERC)

Speaker
Alexander Hollering

The experiment area MEPHISTO

Speaker
Dr Jens Klenke

NICOS - The instrument control user interface

Speaker
Jens Krueger

Combined Neutron and Gamma Tomography at the NECTAR instrument

Speaker
Adrian Losko

J-NSE “PHOENIX”: the neutron spin echo spectrometer upgrade at MLZ

Speaker
Olaf Holderer

NEPOMUC – Positron Beam Facility and Instruments

Speaker
Prof. Christoph Hugenschmidt

Combining SANS with VSANS to extend q-range for morphology investigation of silicon-graphite anodes

Speaker
Dr Neelima Paul

Materials Science Diffractometer STRESS-SPEC - Current status, new developments and future plans

Speaker
Michael Hofmann

Critical scattering in classical and quantum critical systems

Speaker
Mr Heiko Trepka

16:30